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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,674	07/31/2001	Dally Moya	003780-059	1178

7590

04/28/2003

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EXAMINER

ZALUKAEVA, TATYANA

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 04/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,674

Applicant(s)

MOYA ET AL.

Examiner

Tatyana Zalukaeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-25 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Applicants' amendment, paper No.10 has overcome 35 USC112, second paragraph rejections and objections to claims, and therefore, rejections under 35 USC 112, second paragraph and objections are withdrawn.
2. Claims 1-4, 7-9, 11 and 18 are amended, new claims 20-25 are added in paper No.10.
3. Claim 3 is marked as "twice amended" in paper No.10, however, the marked version of claim 3 does not show any changes compare to previously once amended claim 3 in Preliminary Amendment, in paper No. 2. Clarification is required.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1, 2, 4-19 stand rejected and new claims 20-25 are under 35 U.S.C. 102(b) as being anticipated by Rao et al U.S. 5,252,615.

Rao: discloses a coating composition derived from the alcoholysis of polyethylene terephthalate (PET) (abstract). PET resin having a structure presented by Fig.1 in col. 2 is digested into lower molecular weight polymeric units through alcoholysis reaction, and further this product of alcoholysis reacts with an acid functional reactant (col. 2, lines 15-20). Alcohols for use in an alcoholysis reaction of PET are saturated and unstarurated polyols, listed in col. 4, lines 40-61, polyether polyols, listed

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in col. 4, lines 62-68, col. 5, lines 1-5. After alcoholysis the reaction product undergoes further reactions, to produce a polyester suitable for coating composition (col. 6, lines 45-50). Partivciularly discussed are reactions with acids and anhydrides (col. 6, lines 51-53). Described acid functional materials are those having one carboxyl groups and those having two carboxyl groups (col. 6, lines 63-68). **Unsaturated carboxylic acids** are of particular attention as reactants with hydroxyterminated polyester of PET. These acids include palmitic, oleic, linoleic, linolenic, etc. (e.g. higher unsaturated acids). (see col. 7, lines 5-16). In a preferred embodiment, products of esterification of the alcoholysis process can be further modified by **direct acrylic modification**. Direct acrylic modification is typically conducted under conditions also well known in the art, including the procedures taught in U.S. Pat. Nos. 4,735,995 and 4,873,281. (paragraph bridging columns 8 and 9).

When acrylically modifying the low acid value products, the incorporation of a high level of acid-functional acrylic materials will enable the final, acrylic-modified coating product to be reducible in water or other aqueous systems.

(col. 9, lines 15-3). The composition can also contain additives such as flow agents, catalysts, diluents, solvents, UV light absorbers, etc (col. 8, lines 40-45).

Allowable Subject Matter

6. Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. None of the prior art references

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suggest specific combination of a reaction product of PET glycolized with neopentyl glycol and further modified with acrylic acid or its derivative.

Response to Arguments

7. Applicant's arguments filed February 4, 2003 have been fully considered but they are not persuasive.

With regard to Rao, the crux of Applicants' arguments is that Rao fails to mention the use of acrylic and methacrylic acid for "direct acrylic modification", and that the skilled artisan would not apparently envision the use of acrylic or methacrylic acid based upon acids and anhydrides of Rao.

In response to this, it is first noted that a) by using a statement that in a preferred embodiment, products of esterification of the alcoholysis process can be further modified by **direct acrylic modification**, Rao inherently discloses the use of acrylic or methacrylic acids or their derivatives

Rao further teaches that direct acrylic modification is typically conducted under conditions also well known in the art, including the procedures taught in U.S. Pat. Nos. 4,735,995 and 4,873,281. (paragraph bridging columns 8 and 9), thus incorporating by reference the teaching of these two patents and making them a part of his disclosure. Thus, for example, U.S.'281 states that acrylic and methacrylic acids are preferred in the use for direct acrylic modification (col. 3, lines 32-35, claim 10). Therefore, the

teaching of the use of acrylic and methacrylic acids for acrylic modification is present on
rao.

8. Applicant's arguments with respect to claims 1-19 rejected over Gerber in view of EP'147 have been considered but are moot in view of withdrawal of the combination of references from the scope of rejection

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

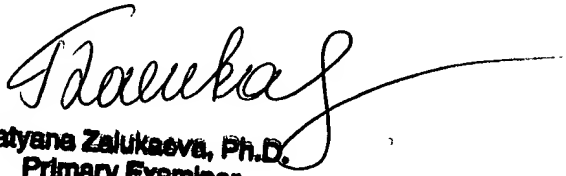
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (703)305-8819. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703)308-2450. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.


Tatyana Zalukaeva, Ph.D.
Primary Examiner
Art Unit 1713

April 18, 2003